REQUEST FOR PROPOSALS

TECHNICAL ASSISTANCE FOR THE

WEATHER OBSERVATION NETWORK SYSTEM

Submission Deadline: **12:00pm NOON**

LOCAL TIME

MAY 21, 2010

Submission Place:

MR. ABDELLAH MOKSSIT
DIRECTOR
DIRECTION DE LA MÉTÉOROLOGIE NATIONALE
FACE PREFECTURE-HAY HASSANI
BP 8106 CASABLANCA OASIS
MOROCCO
(212) 522 913803/05

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

Any and all questions pertaining to the content of the RFP should be sent to Nina Patel, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009.

REQUEST FOR PROPOSALS

Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US$269,110 to Direction de la Météorologie Nationale (the "Grantee") in accordance with a grant agreement dated January 21, 2010 (the "Grant Agreement"). USTDA has provided a grant to the Grantee for a Weather Observation Network System Technical Assistance (TA) program.The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the TA.

1.1 BACKGROUND SUMMARY

The TA will assist with the modernization and optimization of Morocco's observational weather networks. Coverage of the Moroccan territory by the network of existing weather stations is incomplete, and many of these stations are not well suited for broader data collection or longer term forecasting purposes. The modernization and optimization of the observational weather network will rectify these shortcomings and will yield accurate and timely weather forecasting and alerts, as well as a greater understanding of and preparation for the impact of climatic change. Successful performance of the TA will enable DMN to carry out its responsibilities more effectively and efficiently.

Meteorological services have a considerable economic and social impact in Morocco due to the importance of water and agriculture in Morocco. Agriculture is central to the Moroccan economy, and is extremely vulnerable to climatic variability. Furthermore, both severe drought and devastating floods have affected various regions of Morocco in recent years, with loss of life and extensive damage to infrastructure and property. Mitigation of the effects of natural disasters and climate change has become a priority of the Moroccan government. Proper collection, processing, interpretation and dissemination of meteorological data is essential to the management of a wide range of resources and activities, aimed particularly at protecting property, people and the environment.

The DMN is a financially autonomous agency that falls under the jurisdiction of the Secretariat of State in Charge of Water and Environment (Sécretariat d'Etat Chargé de l'Eau et de l'En) of the Ministry of Energy, Mines, Water and Environment. DMN operates four regional offices, in Rabat, Fés, Casablanca and Agadir. Aside from the regional operations, the DMN comprises five major functional divisions and operational units, namely:

- Commercialization and Finance Division (DCF)
- Technical and Equipment Division (DTE)
- Administrative Division (DA)
- National Center for Meteorological Research (CNRM)
- National Meteorological Operations Center (CNEM)

In terms of the DMN's primary mission of forecasting/warning, the proposed TA will focus on the activities of the CNRM and CNEM.

The DMN currently manages 43 synoptic weather stations, most of which are located at airports. A synoptic weather station refers to a weather station that conforms to the World Meteorological Organization standards. The primary function of these stations is to support real-time forecasting and air navigation. Five synoptic stations are dedicated primarily to marine meteorology. In addition, there are some 45 automated weather stations plus some 600 "climatological units" (postes climatologiques) managed by outside parties such as the Ministry of Interior or the Ministry of Agriculture. The DMN also operates a remote-sensing infrastructure comprising five weather radars; however, their coverage of the national territory is not complete.

The DMN has made considerable progress in recent years, particularly regarding meteorological forecasting and alerts. At the same time, much remains to be done to enhance warning systems in order to cover the full range of disasters of meteorological origin (drought, heavy downpours and flash flooding, hailstorms, etc.), and to meet the needs of a growing variety of clients and users. The DMN notes that the need for meteorological information is constantly increasing and impacts a constantly broadening spectrum of social and economic activities (e.g., transportation, agriculture, water resources, land management, the fishing industry and many others). Correspondingly, clients and users are becoming ever more numerous as well as increasingly demanding in terms of quality and responsiveness. In light of the increasing demands that are being placed on the DMN's services, it is a DMN priority to develop the observational networks from a strategic perspective. The TA will assist DMN in developing a well-defined plan for network modernization and optimization, including a comprehensive needs assessment and will create a plan for the procurement of the required additional systems and equipment.

A background Desk Study is provided for reference in Annex 2.

1.2 OBJECTIVE

The Terms of Reference (TOR) for this TA are attached as Annex 5.

1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US$269,110. **The USTDA grant of $US269,110 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted**. Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

1.4 CONTRACT FUNDED BY USTDA

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US$269,110 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

Section 2: INSTRUCTIONS TO OFFERORS

2.1 PROJECT TITLE

The project is called the Weather Observation Network System Technical Assistance.

2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

2.3 DESK STUDY REPORT

USTDA sponsored a Desk Study to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. A copy of the report is attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the TA.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the TA.

2.5 PROJECT FUNDING SOURCE

The TA will be funded under a grant from USTDA. The total amount of the grant is not to exceed US$269,110.

2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

2.7 TAXES

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

2.8 CONFIDENTIALITY

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

2.10 OFFEROR CERTIFICATIONS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English, and only English.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

MR. ABDELLAH MOKSSIT, DIRECTOR, DIRECTION DE LA MÉTÉOROLOGIE NATIONALE, FACE PREFECTURE-HAY HASSANI, BP 8106, CASABLANCA OASIS, MOROCCO , (212) 522 913803/05

An Original and eight (8) copies of your proposal must be received at the above address no later than 12:00pm NOON, on MAY 21, 2010.

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including "original" or "copy number x"; the original and eight (8) copies should be collectively wrapped and sealed, and clearly labeled.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

2.15 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

2.16 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for NINETY (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

2.17 EXCEPTIONS

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

2.18 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, TA and/or other services similar to those required in the TOR, as applicable.

2.19 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals.

2.20 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

2.21 AWARD

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received and, in all cases, the Grantee will be the judge as to whether a proposal has or has not satisfactorily met the requirements of this RFP.

2.22 COMPLETE SERVICES

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

2.23 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US$269,110, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies of the proposal. Proposals received by fax cannot be accepted.

Each proposal must include the following:

Transmittal Letter,
Cover/Title Page,
Table of Contents,
Executive Summary,
Company Information,
Organizational Structure, Management Plan, and Key Personnel,
Technical Approach and Work Plan, and
Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

3.2 COMPANY INFORMATION

For convenience, the information required in this Section 3.2 may be submitted in the form attached in Annex 6 hereto.

3.2.1 Company Profile

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), the information requested in sections 3.2.5 and 3.2.6 below must be provided for each subcontractor.

1. Name of firm and business address (street address only), including telephone and fax numbers.

2. Year established (include predecessor companies and year(s) established, if appropriate).

3. Type of ownership (e.g. public, private or closely held).

4. If private or closely held company, provide list of shareholders and the percentage of their ownership.

5. List of directors and principal officers (President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer; provide full names including first, middle and last). Please place an asterisk (*) next to the names of those principal officers who will be involved in the TA.

6. If Offeror is a subsidiary, indicate if Offeror is a wholly-owned or partially-owned subsidiary. Provide the information requested in items 1 through 5 above for the Offeror's parent(s).

7. Project Manager's name, address, telephone number, e-mail address and fax number.

3.2.2 Offeror's Authorized Negotiator

Provide name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

3.2.3 Negotiation Prerequisites

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the TA as proposed and reflect such impact within the project schedule.

2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

3.2.4 Offeror's Representations

If any of the following representations cannot be made, or if there are exceptions, the Offeror must provide an explanation.

1. Offeror is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of _____. The Offeror has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the TA. The Offeror is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment, or ineligible for the award of contracts by any federal or state governmental agency or authority. The Offeror has included, with this proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of _____.

2. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the Offeror, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The Offeror has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee. USTDA retains the right to request an updated certificate of good standing from the selected Offeror.

3.2.5 Subcontractor Profile

1. Name of firm and business address (street address only), including telephone and fax numbers.

2. Year established (include predecessor companies and year(s) established, if appropriate).

3.2.6 Subcontractor's Representations

If any of the following representations cannot be made, or if there are exceptions, the Subcontractor must provide an explanation.

1. Subcontractor is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of _____. The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the Offeror is selected, to execute and deliver a subcontract to the Offeror for the performance of the TA and to perform the TA. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. Neither the subcontractor nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected subcontractor shall notify the Offeror, Grantee and USTDA if any of the representations included in this proposal are no longer true and correct at the time of the Offeror's entry into a contract with the Grantee.

3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this TA. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the TA.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

3.4 TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the TA.

3.5 EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the TA. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to or larger in scope than the TA as described in this RFP.

Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

Expertise and skills of proposed personnel	40
Proposed approach to the TA and to the individual tasks	35
Pertinent international experience and cross-cultural skills	25
Total:	**100**

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

MR. ABDALAH MOKSSIT, DIRECTOR, DIRECTION DE LA MÉTÉOROLOGIE NATIONALE, FACE PREFECTURE-HAY HASSANI, CASABLANCA OASIS, MOROCCO, (212) 522 913803/05

B: WEATHER OBSERVATION NEWTORK SYSTEM TECHNICAL ASSISTANCE

POC: Nina Patel, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Weather Observation Network System Technical Assistance. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a technical assistance for a weather observation network system technical assistance.

The TA will assist with the modernization and optimization of Morocco's observational weather networks. Coverage of the Moroccan territory by the network of existing weather stations is incomplete, and many of these stations are not well suited for broader data collection or longer term forecasting purposes. The modernization and optimization of the observational weather network will rectify these shortcomings and will yield accurate and timely weather forecasting and alerts, as well as a greater understanding of and preparation for the impact of climatic change. Successful performance of the TA will enable DMN to carry out its responsibilities more effectively and efficiently.

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The U.S. firm selected will be paid in U.S. dollars from a $269,110 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and a background desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: https://www.ustda.gov/USTDA/FedBizOpps/RFP/rfpform.asp. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM

will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English directly to the Grantee by 12:00pm NOON, MAY 21, 2010 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

DESK STUDY

EXECUTIVE SUMMARY

The present Desk Study (DS) reviews a project that was recommended to USTDA in conjunction with a Definitional Mission (DM) to Morocco, carried out in June-September 2008. The project in question was a Technical Assistance (TA) to the Direction de la Météorologie Nationale (DMN), the Moroccan national meteorological agency, which was seeking assistance with the modernization and optimization of its observational weather networks.

The Final Report of the DM, which was submitted on September 22, 2008, included a proposed Terms of Reference (the "Agreed TOR") and budget for the TA in question. The TOR in question had been formally agreed to with DMN after an extensive series of meetings in Casablanca in June 2008 and subsequent follow-up activities.

The proposed TA to the DMN did not go forward at the time. After an interval of several months, the DMN expressed renewed interest in proceeding with the TA. Given the possibility that the DMN's circumstances and/or requirements might have changed in the interval, USTDA wished to ascertain whether the findings of the DM Final Report, and in particular the proposed TOR and budget, needed to be modified or updated. To this effect, USTDA engaged the present DS Contractor and also contacted representatives of DMN who had been involved in the development of the Agreed TOR.

DESK STUDY BACKGROUND AND FINDINGS

The present Desk Study (DS) reviews a project that was recommended to USTDA in conjunction with a Definitional Mission (DM) to Morocco, carried out in June-September 2008.[1] The project in question was a Technical Assistance (TA) to the Direction de la Météorologie Nationale (DMN), the Moroccan national meteorological agency, which was seeking assistance with the modernization and optimization of its observational weather networks.

The Final Report of the DM, which was submitted on September 22, 2008, included a proposed Terms of Reference (TOR) and budget for the TA in question. The TOR had been formally agreed to with DMN after an extensive series of meetings in Casablanca in June 2008 and subsequent follow-up activities. (These TOR will henceforth be referred to as the "Agreed TOR.")

Notwithstanding the positive recommendation, the proposed TA to the DMN did not go forward at the time. After an interval of several months, the DMN expressed renewed interest in proceeding with the TA. Given the possibility that the DMN's circumstances and/or requirements might have changed in the interval, USTDA wished to ascertain

[1] The DM was carried out by Martin Morell, who is also the Contractor for the present DS.

whether the findings of the DM Final Report, and in particular the proposed TOR and budget, needed to be modified or updated. To this effect, USTDA engaged the present DS Contractor and also contacted representatives of DMN who had been involved in the development of the Agreed TOR, in particular Mr. Driss Khalfi, Head of the General Forecasting Service.

Additionally, USTDA requested the DS Contractor to review the earlier DM Report to verify that its findings and recommendations remained valid and applicable. In particular, USTDA requested that the DS Contractor contact DMN to clarify the prospects for Implementation Financing, since there appeared to be some uncertainty as to what specific sources of financing could be drawn upon. The DS Contractor conducted a telephone interview with Mr. Khalfi on 11 August 2009 (see the inserted comment at the end of Section E of the DM Report).

The Appendix that follows reproduces the DM Final Report with the present DS Contractor's comments interpolated (in *italics*). As will be seen, for the most part the DS Contractor believes that the findings and recommendations of the DM Final Report stand as originally written.

APPENDIX

COMMENTED VERSION OF FINAL REPORT OF

SEPTEMBER 22, 2008:

PROPOSED TECHNICAL ASSISTANCE TO THE DIRECTION DE LA

METEOROLOGIE NATIONALE (DMN)

A. Executive Summary

Among other activities, the present Definitional Mission (DM) to the ICT Sector in Morocco evaluated a request for a Technical Assistance (TA) made to USTDA by the Direction de la Météorologie Nationale (DMN), the Moroccan national meteorological agency. The DMN is seeking assistance with the modernization and optimization of its observational weather networks.

As in other countries, the information provided by meteorological services has a considerable economic and social impact in Morocco. In particular, water and agricultural resources are central to the Moroccan economy, and both of these resources are vulnerable to climatic variability, so that meteorological information is exceptionally important to their management. Also, air quality in urban areas of Morocco is of increasing concern to the authorities. Furthermore, both severe drought and devastating floods have affected various regions of Morocco in recent years, with loss of life and extensive damage to infrastructure and property. Mitigation of the effects of these disasters has become a national priority.

Proper collection, processing, interpretation and dissemination of meteorological data is essential to the management of a wide range of resources and activities, related in particular to the protection of property, people and the environment, and the observational networks comprise the basic infrastructure framework within which these processes are carried out. The DMN believes that it has made considerable progress in recent years, particularly as regards meteorological forecasting and alerts. At the same time, much remains to be done to enhance warning systems, in order to cover the full range of disasters of meteorological origin, and to meet the needs of a growing and diverse community of clients and users.

According to the DMN, the deployment of the various observational networks has frequently been driven by short-term *ad hoc* concerns related to immediate needs of particular users or economic sectors, rather than by a unified, "big-picture" strategic vision. In responding to these short-term concerns, moreover, attention often was not given to longer-term issues such as the resource requirements for ongoing maintenance and staffing. In light of the increasing demands that are being placed on the DMN's services, the DMN believes that it is now a priority matter to elaborate a well-defined strategic plan for network modernization and optimization. The aim of the TA is to assist DMN in the achievement of this objective.

The U.S. export potential of the TA is difficult to calculate in advance of the study itself, but is conservatively estimated at around US$5.5 million.

The proposed TA would have substantial positive developmental impact, both for the Moroccan economy as a whole and for DMN as an organization. Coverage of Moroccan territory by the network of existing weather stations is incomplete, and some of these stations were installed to fill specific needs and

are not well suited for broader or longer-term purposes. The proposed modernization and optimization of the observational weather network will rectify these shortcomings and will yield significant immediate benefits, on a national scale, in terms of complete, accurate and timely weather forecasting and alerts, as well as longer-term benefits in terms of understanding and preparing for the impact of climatic change. Furthermore, successful performance of the TA will enable DMN to carry out its responsibilities more effectively and efficiently; and the availability of more comprehensive and better-quality data will enable DMN to conduct more sophisticated analyses, in particular as regards the interpretation of long-term climatic effects.

Accordingly, the DM Contractor believes that funding of the TA on behalf of DMN represents a good use of USTDA resources, and recommends that the TA be funded at a budget level of $269,110.

[DS Contractor comment: The Executive Summary remains valid.]

B. Project Description

1. DEFINITIONAL MISSION BACKGROUND

One purpose of the Definitional Mission (DM) was to evaluate the terms, feasibility and impact of a request for a Technical Assistance (TA) made to USTDA by the Direction de la Météorologie Nationale (DMN), the Moroccan national meteorological agency. The DMN is seeking assistance with the modernization and optimization of its observational weather networks. Proper collection, processing, interpretation and dissemination of meteorological data is essential to the management of a wide range of resources and activities, related in particular to the protection of property, people and the environment, and the observational networks comprise the basic infrastructure framework within which these processes are carried out.

It is generally recognized that weather and climate forecasting is a subtle and complex scientific process, and that the information provided by meteorological services has a considerable economic and social impact. In particular, water and agricultural resources are central to the Moroccan economy, and both of these resources are vulnerable to climatic variability, so that meteorological information is exceptionally important to their management. Additionally, air quality in urban areas of Morocco is of increasing concern to the authorities, in view of the harmful effects of urban pollution on the health and quality of life of the citizenry.

Both severe drought and devastating floods have affected various regions of Morocco in recent years. Aside from the incalculable loss of human life, major episodes of these types have resulted in extensive damage to infrastructure and property, with monetary losses typically running into the tens of millions of dollars. Accordingly, mitigation of the effects of these disasters, as well as management of the associated risks, has become a

national priority. A particular aim is to create an integrated national plan that stresses the threefold aspects of Prevention, Forecasting and Protection.

On a broader scale, long-term climate change, and its impact on various social and economic sectors (water and agricultural resources in particular), presents new challenges which will have to be met in forthcoming years and decades. Accordingly, improvement of knowledge in the field of climate is a prerequisite for the development of policies for responding and adapting to extreme meteorological phenomena.

The DMN believes that it has made considerable progress in recent years, particularly as regards meteorological forecasting and alerts. At the same time, much remains to be done to enhance warning systems, in order to cover the full range of disasters of meteorological origin (drought, heavy downpours and flash flooding, hailstorms, etc.), and to meet the needs of a multiplicity of clients and users. The DMN notes that the need for complete, accurate and timely meteorological information is constantly increasing and impacts a constantly broadening spectrum of social and economic activities (e.g., transportation, agriculture, water resources, land management, the fishing industry and many others). Correspondingly, clients and users are becoming ever more numerous as well as increasingly demanding in terms of quality and responsiveness.

The DMN must also take account of long-term economic factors such as the U.S.-Morocco Free Trade Agreement, signed in 2004, and the liberalization of the customs regime with the European Union set for 2010. The likely effect of these developments is a progressive reduction in state support, combined with increased demand on the part of DMN's users and the population at large for high-quality public services.

In conducting the DM, the Contractor was tasked in particular with evaluating the technical, financial and economic aspects of DMN's request; reporting the findings to USTDA; and recommending whether or not USTDA should support the request for a TA or other activities on behalf of DMN. In the event of an affirmative recommendation, the DM Contractor was to develop a budget and Terms of Reference (TOR) for the TA or other activities.

The DM Contractor conducted several interviews with DMN personnel over the course of a two-week period in June 2008, and reviewed and revised a TOR initially proposed by DMN. As a result of these activities, the DM Contractor determined that an affirmative recommendation for USTDA-supported Technical Assistance to DMN should be made (see below for further details).

2. DMN MISSION AND RESPONSIBILITIES

The National Meteorology Department (Direction de la Météorologie Nationale, DMN) is the national public-sector agency responsible for all activities related to weather and climate information and forecasting in Morocco. Its principal mission and functions can be summarized as follows:

- To support activities related to meteorological and climatological information and forecasting necessary to satisfy all the requirements of users at the national level, as well as to support international data exchange in accordance with agreements which have been ratified by the Kingdom of Morocco;
- To conduct theoretical, experimental and applied studies and research in atmospheric science, meteorology and climatology, as well as studies and research related to its mission;
- To act as a reference standard as regards the measurement and observation of meteorological, climatological and environmental parameters, in accordance with international norms and standards;
- To strengthen bilateral and multilateral cooperation and participate in the preparation of international agreements, in coordination with interested agencies, in the fields of meteorology and climatology; formulate the pertinent regulatory instruments; and ensure that they are carried out.

3. DMN STRATEGIC OBJECTIVES

Recently articulated strategic and developmental objectives of DMN include the following:

- To continuously increase the quality of meteorological forecasts and alerts issued to the various social and economic sectors that are affected;
- To support and develop research programs in areas of priority national concern, in particular as regards the study, understanding and forecasting of climatic variability;
- To strengthen international and national cooperation;
- To consolidate the regional devolution of DMN and to develop a new institutional framework;
- To develop commercial activities and promote improved means of communication.

4. DMN Organization and Activities

From an institutional standpoint, since late 2002 the DMN has formally been under the jurisdiction of the State Secretariat Responsible for Water (Sécretariat d'Etat Chargé de l'Eau) of the Ministry of National and Regional Development, Water and the Environment (Ministère de l'Amenagement du Territoire, de l'Eau et de l'Environnement). In terms of its financial resources, the DMN is categorized as a SEGMA (Service Geré de Manière Autonome, or Autonomously Administered Service), meaning that it has some degree of independence from state budget financing. Specifically, it is authorized to develop and market products and services on a commercial basis, although the state continues to provide budgetary support (e.g., for employee salaries). According to press reports, the DMN has consistently run budgetary surpluses as a result of commercial activities.

[DS Contractor comment: The State Secretariat is now known as the State Secretariat Responsible for Water and the Environment (Sécretariat d'Etat Chargé de l'Eau et de l'Environnement), while the Ministry has undergone a consolidation and is now known as the Ministry of Energy, Mines, Water and the Environment (Ministère de l'Energie, des Mines, de l'Eau et de l'Environnement).]

Total DMN staff comprises nearly 900 employees, divided roughly equally between the central location in Casablanca and regional operations. The DMN headquarters building is located in the Oasis section of Casablanca, on the grounds of the Casablanca-Anfa airport.[2] There are four regional operations (termed "Structures"), based in Rabat, Fès, Casablanca and Agadir respectively.

Aside from the regional operations, the DMN comprises five major functional divisions and operational units, namely:

- Commercialization and Finance Division (DCF)
- Technical and Equipment Division (DTE)
- Administrative Division (DA)
- National Center for Meteorological Research (CNRM)
- National Meteorological Operations Center (CNEM)

In view of their importance, both in terms of the DMN's primary mission of forecasting/warning and in terms of the proposed TA, the activities of the CNRM and CNEM will be described in greater detail.

CNRM

A priority area for the CNRM is the development of high-quality forecasting. The CNRM has been working systematically in this area since the early 1990s, with a particular focus on improvement of technical resources, developmental structures and scientific skill sets. The CNRM also furnishes the CNEM with certain forecasting tools, in particular tools and outputs derived from the so-called Albachir model.

The principal activities of the CNRM are as follows:

Digital forecasting: The CNRM has adapted the limited-domain forecasting model known as Aladin to Morocco, thereby creating the so-called Albachir digital forecasting model which provides reliable short-term forecasting. The Albachir model, which has a relatively fine mesh (16 km on a side), was developed in collaboration with France and various Eastern European countries. It currently provides forecasts of up to 48 hours on a twice-daily basis.

Climate studies: The principal aim of climate studies is to track climatic evolution and to develop long-term precipitation forecasts for Morocco. The Climate Study Service of DMN is engaged in two projects, the first of which (Al Moubarak) is being done in collaboration with the University of Oklahoma (USA), while the second (El Masifa) is a joint effort with Météo-France and the meteorological services of Tunisia and Algeria. Both of these projects are focused on monthly and seasonal precipitation forecasting.

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[2] The Casablanca-Anfa airport, which lies within the city limits, was closed to civilian traffic in 2006; the main airport serving Casablanca is Mohammed V International Airport, located some 30 km from the city center.

Atmospheric research: The so-called Al Ghait weather-modification program was inaugurated in 1983 in an attempt to alleviate the effects of the prolonged drought in Morocco in 1979–1983. The program is conducted in collaboration with the Gendarmerie Royale (Royal Police) and the Royal Air Force. The principal aims of the program are as follows:

- To define and implement a scientific cloud-seeding program during the winter months to alleviate drought conditions;
- To estimate the amount of additional water generated by cloud seeding in the target zone;
- To improve the scientific basis of the program by studying clouds and the processes of precipitation formation.

Radar and satellite applications: The Radar and Satellite Service of DMN manages five Doppler radar installations located in Casablanca, Larache, Agadir, Fés and Khouribga. Satellite images from Meteosat and from the NOAA low-earth-orbit satellites are also received regularly.

Agrometeorology: This activity deals with the production of agroclimatic resources (climatic-risk cartography, etc.) intended for a variety of users (insurance companies, farming enterprises, administrations, agriculture schools, etc.). A variety of products providing support and assistance to the agricultural community, based on meteorological parameters such as precipitation, temperature, frost, etc., have been developed. The activity is conducted in collaboration with other Moroccan institutions such as the Agronomy and Veterinary Institute (IAV).

CNEM

CNEM is the leading authority as regards the development of forecasts and continuous monitoring of weather in Morocco. The CNEM consists of the following administrative units:

- General Forecasting Service
- Aeronautical Forecasting Service
- Marine Forecasting Service
- Telecommunications and Data Processing Service

CNEM offers a variety of resources – model outputs, extensive experience in interpreting and weighting particular phenomena or elements, as well as critical and synthetic skills – to develop forecasts and to meet users' needs as regards very short-term, short-term and medium-term forecasting.

4. DMN Existing Infrastructure

The DMN currently manages 43 synoptic weather stations, most of which are located at airports. The primary function of these is to support real-time forecasting and air navigation. Five synoptic stations are dedicated primarily to marine meteorology. In

addition, there are some 45 automated weather stations plus some 600 "climatological units" (postes climatologiques) on the territory of Morocco, typically managed by outside parties such as the Ministry of Agriculture or the Interior; the majority of these units are employed for precipitation measurement. It is reported, however, that only about half provide reliable data. Other observational systems include a network of lightning detectors; two marigraphs (recording tide gauges) at Tangier and Casablanca; and a number of installations for measuring air quality and ozone levels, including a mobile laboratory unit.

The DMN also operates a remote-sensing infrastructure comprising five weather radars; however, their coverage of the national territory is not complete.

New automated stations are being acquired, and existing stations are being upgraded or modernized, on an ongoing basis.

Telecommunications infrastructure is also key to the operation of nationwide weather networks. The DMN reports that it is in the process of implementing a Virtual Private Network (VPN), with priority given to the radar installations. The VPN is expected to be completed by the fourth quarter of 2008. In addition to improving the performance and reliability of the telecommunications infrastructure, the VPN is expected to yield savings in ongoing operational costs, which are regarded as excessively high.

Computer resources of the DMN include a high-performance IBM mainframe with a rating of 54 gigaflops (billions of operations per second) and a storage capacity of 100,000 gigabytes. The mainframe is used in particular to run the Albachir forecasting model, the Arpège-climat atmospheric general circulation model, and various research programs.

5. DMN's Request to USTDA

The observational networks upon which the DMN relies are of various types (synoptic, aeronautical, climatic, marine, agrometeorological, air pollution measurement, etc.). Currently these networks cover the entire territory of the country, with differing spatial resolutions depending on the function and purpose of each type of network.

Much of the basic network infrastructure is managed directly by DMN; at the same time, however, significant numbers of auxiliary observation points are managed by outside parties, chiefly public-sector entities (e.g., those responsible for water, agriculture, forestry and so forth).

It is the opinion of DMN that the deployment of the various observational networks has frequently been driven by short-term *ad hoc* concerns related to immediate needs of particular users or economic sectors, rather than by a unified, "big-picture" strategic vision. In responding to these short-term concerns, moreover, attention often was not given to longer-term issues such as the resource requirements for ongoing maintenance and staffing.

In light of the increasing demands that are being placed on the DMN's services, as described above, the DMN believes that it is now a priority matter to view the development of the observational networks from a strategic perspective, and to elaborate a well-defined plan for network modernization and optimization, including a comprehensive needs assessment; an economic and financial analysis to estimate costs and benefits of the proposed modernization; and a plan for procurement of the required additional systems and equipment. The DMN requires outside assistance to achieve these goals, and has requested support for a Technical Assistance from USTDA for the purpose.

6. Previous USTDA Assistance to DMN

It should be noted that DMN was recently awarded a USTDA grant for a Feasibility Study (FS) related to upgrading the national weather radar network.[3] The primary purpose of the FS is to evaluate the current radar network; to identify technical and operational deficiencies; and to assess requirements for additional weather radar installations. The FS has not yet commenced as of this writing (September 2008). However, in the event that the Technical Assistance proposed in the present report is approved and undertaken, it is likely that the two projects will run concurrently to some extent. Correspondingly, some degree of coordination between the two projects will be required in order to ensure that there is no duplication of effort.

[DS Contractor comment: The FS in question (the Weather Radar Network Feasibility Study) is currently in progress. The selected FS contractor is Burgess & Niple.]

C. Developmental Impact

Primary Developmental Benefits

Modernization of the observational weather networks in Morocco is expected to have major developmental benefits. As already noted, water resources and agriculture are central to the Moroccan economy – the agricultural sector accounts for some 20% of Moroccan GDP – and both these resources are vulnerable to climatic variability. Clear evidence of this is provided by a comparison of statistics for 4Q 2007, a period of relative drought, versus the same period in 2006: agricultural revenues declined by 19.4%, compared with 23.7% growth the previous year. As a result, Morocco's overall economic growth fell to 2.1% in the fourth quarter of 2007, from 8.1% in the same period in 2006.[4]

Another major weather-dependent economic sector in Morocco is the fishing industry. Morocco has 2140 miles of Atlantic and Mediterranean coastline, as well as exclusive fishing rights over a zone extending to 200 nautical miles with an area of some 385,000

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[3] See the report of USTDA Definitional Mission 2006-21024A, *Wastewater Projects in Jordan and Morocco*, Section C.VII: "Feasibility study for upgrading the weather radar network in Morocco," pp. 139–157.

[4] Data reported by the Haute Commission de Planification du Maroc.

sq. mi. The industry generates more than US$600 million of foreign exchange annually and is a significant source of employment. Aside from the obvious need for accurate and timely short-term weather forecasting, the industry also has a need for longer-term climatological studies, particularly in view of the fact that coastal fish stocks such as the European sardine have been shown to be quite sensitive to climate-induced factors.

Flash floods are also a significant problem in Morocco. For example, in November 2002 heavy rains in the vicinity of Berrechid, south of Casablanca, caused the usually dry Oued Bengueribi river to burst its banks and flood a small village, resulting in at least 30 deaths. In May 2006 the desert village of Merzouga experienced a similar calamity, with loss of life and extensive damage to property and livestock. Improved prediction and warning capabilities are critical to mitigating the effects of these disasters.

Finally, it should be noted that the problem of urban air pollution is becoming increasingly salient, particularly in Casablanca which accounts for about 45% of industrial and economic activity, as well as about half of all registered motor vehicles in the country. Again, improved prediction and warning capabilities can assist in mitigating the impact on the health and quality of life of the citizenry.

Accordingly, the developmental benefits associated with modernization and optimization of the observational weather networks in Morocco are potentially very great. Specific developmental benefits can be enumerated as follows:

- **Infrastructure:** Direct developmental benefits in terms of infrastructure will accrue from the TA's recommendations for modernization and optimization of the observational weather network, including the siting, construction and equipping of new weather stations, as well as upgrading of existing ones.
- **Human Capacity Building:** In terms of the number of people involved, the initial direct capacity-building impact of the proposed TA will probably be confined to a group of perhaps 50–100 people within the DMN organization, who have direct responsibilities for overseeing the various observational weather networks. However, the availability of more complete, accurate and timely weather data will enable the DMN to conduct more extensive and sophisticated research into weather-related phenomena, and corresponding skill sets will need to be developed. The TA is expected to address this aspect as well. Additionally, the modernization and optimization process can be expected to result in an operation which is less resource-intensive in terms of personnel, thus freeing up DMN staff from the need to carry out low-level routine observational tasks.
- **Technology and Knowledge Transfer:** The proposed TA is expected to confer certain technology- and knowledge-transfer benefits. Although observational weather-station technology is fairly standard, the TA will provide exposure as to how the available and planned infrastructure and resources can be utilized to maximum effect. Additionally, as noted, the DMN will be enabled to conduct more extensive and sophisticated research into weather-related phenomena.

- **Market Oriented Reforms:** As a technical intervention on behalf of a state agency in Morocco, the proposed TA would not contribute significantly to market-oriented reforms. It can be mentioned, however, that more complete, accurate and timely forecasting and alerts will lead to greater efficiency and productivity in certain economic sectors, notably agriculture and the fishing industry.

Specific benefits to the DMN organization were enumerated above (see Section B).

[DS Contractor comment: Section C above remains unchanged.]

D. Project Sponsor's CAPABILITY AND Commitment

The proposed Technical Assistance is strongly supported by senior management of the DMN, and in particular by Mr. Abdalah Mokssit, who is simultaneously the Deputy Director of DMN and the head of the CNRM. Other senior staff interviewed by the DM Contractor, including the heads of the General Forecasting Service, the Remote Sensing Service, and the Measurement Network Coordination Service, were equally supportive. Additionally, it was apparent from these interviews that DMN management has a thorough understanding of both traditional and more advanced weather-station technology and equipment; a clear vision of what needs to be done to improve DMN's ability to carry out its responsibilities; and an appreciation of the organizational issues that will need to be dealt with in order to ensure that maximum benefit is derived from the network modernization and optimization.

[DS Contractor comment: According to Mr. Driss Khalfi, Mr. Mokssit is now the Director, while the post of Deputy Director is occupied by a Mr. Shafki. In light of Mr. Mokssit's support for the proposed TA, DMN's commitment should be, if anything, even stronger now than in June 2008.]

E. Implementation Financing

The amount of implementation financing that would be required to modernize and optimize the existing observational weather networks is not presently known. Furthermore, it is difficult, if not impossible, to provide clear-cut estimates in advance of the findings and recommendations of the proposed Technical Assistance. Indeed, one of the tasks of the TA is to provide an economic and financial analysis that will help to quantify the level of financing required, as well as to identify potential financing sources.

However, some general considerations can be expressed. As previously noted, DMN has a considerable degree of independence from the state budget, and is reported to operate on a profitable basis. Nonetheless, in view of the fact that the DMN is contemplating a major upgrade of the weather radar network, and that the cost of this activity has been

estimated at around US$10 million,[5] it seems likely that DMN will not be able to finance the modernization and optimization project exclusively on its own resources. Still, senior management reports that DMN had revenues from commercial operations on the order of US$10 million in 2007, and this revenue level is expected to increase over time. Although details were not provided, it is reported that a large proportion of the surplus goes to finance investments such as the acquisition of the weather radar systems, and substantial amounts are said to have been already set aside for their acquisition.

It should be added that the proposed project has substantial positive developmental impact and, moreover, would seem to align well with the priorities of a number of major donor and lending institutions. Furthermore, since the DMN operates under the aegis of the State Secretariat Responsible for Water of the Ministry of Energy, Mine, Water and the Environment, funding requests made by these institutions on behalf of DMN would qualify for sovereign guarantees.

Preliminary research and follow-up discussions suggests the following possible funding sources in particular:

- **World Bank (WB):** The WB's recent Country Assistance Strategies (CAS) emphasize reduction of agricultural vulnerability and environmental threats, agricultural policy and management strategy for water resources. All of these areas are closely linked to the availability of high-quality meteorological data, forecasts and alerts. Accordingly, it would appear that the project would receive favorable consideration for funding by the WB.

- **USAID:** Information obtained from USAID indicates that USAID would in principle be supportive of the project in view of its substantial social and economic benefits. However, USAID reports that it is just beginning a top-to-bottom review of its country strategy for Morocco, with the new strategy expected to be in place around September 2009. According to USAID, it is likely that there will be renewed assistance for the water sector, although it is too early to say what specific projects would be supported.

- **Kreditanstalt für Wiederaufbau (KfW):** Kreditanstalt für Wiederaufbau (Reconstruction Credit Institute) is the development bank of the German government. It is quite active in Morocco; its activities focus on water resource management, environmental protection and resource conservation. Again, all of these areas are closely linked to, and rely on the availability of, meteorological data. Accordingly, KfW is regarded as a good candidate for financing. Furthermore, KfW places no restrictions on the nationality of bidders, so that U.S. companies would not be precluded from participating in a KfW-financed project.

- **African Development Bank (AfDB):** The AfDB is a major investor in Morocco; a total of US$269 million in AfDB loans and grants was approved for Morocco in 2007. The principal focus is on water and sanitation, air pollution abatement and solar power projects. Again, these priorities align favorably with those of the proposed project.

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[5] Report of USTDA Definitional Mission 2006-21024A, *Wastewater Projects in Jordan and Morocco*, Section C.VII: "Feasibility study for upgrading the weather radar network in Morocco," p. 143.

Additionally, it would appear that, to the extent that the GIS equipment is sourced from the U.S., the supplier would qualify for financing support through the U.S. Export-Import Bank (U.S. Ex-Im), which could enable the equipment to be procured under more favorable payment terms.

[DS Contractor comment: As noted previously, the DS Contractor contacted Mr. Driss Khalfi to clarify the DMN's position on implementation financing. It appears that DMN is now seeking to obtain implementation financing primarily via a budget allocation from the Ministry of Energy, Mine, Water and the Environment, and intends to use the results of the TA to support its request for budget funds. Although Mr. Khalfi was not entirely clear on this point, it does not appear that any internal or external resources have already been set aside for the purpose.

F. US Export Potential

General

Morocco is actively seeking to develop key high-technology and value-added sectors of the economy, most notably (but not exclusively) the Information and Communications Technology (ICT) industry. Specific objectives include achieving a turnover in the ICT sector of nearly US$9 billion by 2012, a figure that represents roughly 10% of GDP.

The general progress of the Moroccan economy has created significant export opportunities for U.S. firms. Furthermore, these opportunities have been facilitated by the coming into effect, in 2006, of the Morocco-U.S. Free Trade Agreement (FTA), which eliminated customs duties on most U.S.-made products, and also created a more favorable environment for U.S. companies to enter the Moroccan market.

The U.S. Commercial Service regards Morocco is a very attractive location for U.S. investors, and estimates that more than 120 U.S. firms now have offices, factories, subsidiaries or joint ventures operating in Morocco. Collectively, U.S. firms have invested more than US$600 million and are reported to have created 90,000 direct and indirect jobs. Specific high-tech firms with a presence in Morocco include include Alcatel/Lucent, Cisco, Compaq, 3Com, Dell, Hewlett-Packard, IBM, Microsoft, Motorola and Oracle, among others.

Estimation of U.S. Export Potential

Estimation of the potential for U.S. exports that might result from successful completion of the TA on behalf of DMN is problematic. It is the purpose of the TA to quantify the additional systems and equipment that will need to be acquired to achieve a comprehensive modernization and optimization of the observational weather networks, and to establish the particular required functionality of these systems and equipment. A

precise estimation of the export potential is not possible until the work of the TA is carried out.

To obtain even a rough estimate, it is necessary to resort to some assumptions. A plausible assumption is that the TA will recommend that the number of observational stations currently deployed be doubled, and that existing ones be upgraded to some extent. In this scenario, based on the types and numbers of existing observational systems and units (excluding weather radars, which are the subject of a separate USTDA-funded assistance), we arrive at the following estimate of the implementation cost:

Cost Category	Quantity	Unit Cost	Total Cost
Synoptic weather stations – new	43	$50,000	$2,150,000
Synoptic weather stations – upgrade	43	$10,000	$430,000
Automated weather stations – new	45	$10,000	$450,000
Automated weather stations – upgrade	45	$5,000	$225,000
Climatological units – new	600	$1,000	$600,000
Climatological units – upgrade	300	$500	$150,000
Other systems – new			$1,000,000
Other systems – upgrade			$500,000
Telecommunications equipment (estimated at 20% of cost of above items)			$1,101,000
Additional computing hardware and resources			$500,000
Supplies and consumables (over 5-year period)			$500,000
		Grand Total:	**$7,606,000**

Moreover, the majority of the cost categories cover items that could be sourced from the United States. The possible exceptions are the smaller climatological units and the telecommunications equipment (the latter could be provided locally as part of a "turnkey" Virtual Private Network), and recurring-cost items such as supplies and consumables. Collectively, these items account for slightly more than US$2 million of the total, so that the U.S. export potential in the scenario under consideration can be estimated at US$5.5 million.

Potential U.S. Suppliers

U.S. suppliers have a strong presence in the field of meteorological/climatological technology and solutions. Some of the better-known U.S. companies include:

General Meteorological Equipment

- **Davis Instruments** (Hayward, CA): Complete weather stations featuring state-of-the-art technology.
- **Warren-Knight Instrument Co.** (Philadelphia, PA): Distributor of weather station equipment such as weather balloons, compasses and sensors. Custom fabrication capabilities for weather stations and weather station equipment.
- **Campbell Scientific, Inc.** (Logan, UT): Manufacturer and distributor of weather station equipment including weather sensors. Available devices include sensors for measuring air temperature and relative humidity, barometric pressure, conductivity, dissolved oxygen, distance, moisture, etc.
- **NovaLynx Corp.** (Auburn, CA): Custom manufacturer of weather station equipment for a variety of applications.

Weather Radar Systems and Solutions

- **EWR Weather Radar Systems** (St. Louis, MO): Supplier of portable weather radar systems; claims to be major supplier to U.S. military
- **Baron Weather Solutions** (Huntsville, AL): Supplier of weather radars and integrated solutions for a variety of meteorological applications
- **Enterprise Electronic Corporation** (Arlington, VA): Part of the Republic Group, EEC specializes in the manufacture of weather radars and allied support systems
- **Radtec Engineering, Inc.** (Bloomfield, CO): Specializes in ground-based and airborne weather radars with a modular architecture

Additionally, there are many U.S.-based suppliers of specialized products, software packages and solutions with meteorological/climatological and allied applications.

In the case of DMN, additional factors favoring U.S. suppliers are: 1) the current weather radar network utilizes US equipment, and 2) the Free Trade Agreement between the U.S. and Morocco, which reduces overheads associated with project implementation, and may also facilitate financing.

[DS Contractor comment: Since the TOR are unchanged, and there is no evidence to indicate any significant variation in system/component unit costs, the above estimates remain valid.]

G. Foreign Competition

While the U.S. has a strong presence on the market, there is significant foreign competition in vitually every aspect of the market. Additionally, it should be noted that Morocco has long-standing ties with France, and increasingly with countries of the European Union (EU).

The most significant foreign competition that has been identified includes the following.

- **Vaisala Oyj** (Finland). With more than 1000 employees and worldwide net sales in 2007 of €224 million (approximately US$330 million), Vaisala is probably the single most formidable foreign competitor. Vaisala manufactures the well-known Sigmet line of weather station equipment, including ultrasonic and mechanical wind speed and direction instruments, present weather and visibility sensors. In terms of sales to Morocco, moreover, Vaisala enjoys the advantage that it has a subsidiary operation in France.
- **Meteo France International** (France). Meteo France International (MFI) is the national meteorological service of France, with a staff of 3700 and a large number of locations in France and its territories. In addition to its operational and research activities, MFI designs, supplies, and installs weather observation networks for a wide range of applications, including aviation, agriculture, ground transportation and environmental surveillance. MFI has an established record of sales to DMN: in 2004 it supplied the Transmet automatic message switching system, together with associated support and training; while in 2006 it supplied the Synergie expert tool for forecasting and alerts. MFI has also made sales to Algeria, Tunisia, Libya and Egypt among others.
- **Telvent (Spain).** Telvent is a large and diversified company headquartered in Madrid, which offers solutions and services in energy, transport, and environmental protection as well as climatology, meteorology and hydrology. In the field of climatology, Telvent provides a range of solutions for the detection, prediction and prognosis of environmental phenomena and their possible consequences. These include a variety of remote-sensing solutions employing weather radars. While Telvent is not known to be currently active in Morocco, its weather-radar systems are deployed in Spain and Mexico among other countries, and Telvent recently supplied a complete national meteorological system, including a radar, to the National Meteorology Institute of Mozambique.
- **Selex (Italy).** Selex Communications is a division of Finmeccanica, a large Italian industrial conglomerate. Selex supplies advanced communication, navigation and identification systems and solutions that are used for protection of communities and national infrastructure. While not specializing in weather systems per se, Selex is known to have bid on a number of large international weather system-related projects.

In addition to these companies, there are a number of Asian suppliers, notably Sumitomo Electric Company (Japan), although the latter is not known to be active in Morocco or North Africa. Chinese manufacturers of low-cost meteorological instruments are also becoming increasingly active; again, they are not known to have a presence in the region. Finally, it should be mentioned that there are large numbers of suppliers of basic weather measurement devices for home, office and recreational use (e.g., boating); however, these devices are generally not certified by the World Meteorological Association (WMO) and therefore are not acquired by national meteorological services.

[DS Contractor comment: The market for meteorological systems and equipment evolves relatively slowly; there is no evidence of any significant changes to the above description.]

H. Impact on the Environment

As a project whose main activities involve technical assistance and consulting, the recommended TA is not expected to have any measurable environmental impact. The eventual indirect benefits to the environment from weather network modernization and optimization, resulting in a more up-to-date, comprehensive and integrated approach to weather and climate forecasting and alerts on a national scale, could be substantial.
[DS Contractor comment: Section H remains valid.]

I. Impact on US Labor

The "Impact on US Labor" Statement reads as follows:

> "The Foreign Operations, Export Financing and Related Programs Appropriations legislation restricts U.S. foreign assistance from being used to provide: (a) any financial incentive to a business enterprise currently located in the United States for the purpose of inducing such an enterprise to relocate outside the United States if such incentive or inducement is likely to reduce the number of employees of such business enterprise in the United States because United States production is being replaced by such enterprise outside the United States; (b) assistance for the purpose of establishing or developing in a foreign country any export processing zone or designated area in which the tax, tariff, labor, environment, and safety laws of that country do not apply, in part or in whole, to activities carried out within that zone or area; (c) assistance for any project or activity that contributes to the violation of internationally recognized workers rights; and (d) direct assistance for establishing or expanding production of any commodity for export by any country other than the United States, if the commodity is likely to be in surplus on world markets at the time the resulting productive capacity is expected to become operative and if the assistance will cause substantial injury to United States producers of the same, similar, or competing commodity."

There is nothing in the proposed Technical Assistance to indicate any likely breach of the above conditions.

[DS Contractor comment: Section I remains valid.]

J. Qualifications

General Qualifications of Contractor

As is evident from the accompanying Terms of Reference (TOR; see Annex I), the proposed Technical Assistance involves a comprehensive effort to assist the DMN to upgrade and optimize the various weather networks it oversees, as well as to assist in the

preparation for acquisition of the necessary additional systems and equipment, while at the same time ensuring that the DMN organization has the corresponding human resources and competencies that will be required by the future environment. The following general attributes on the part of the Contractor are considered critical to the successful outcome of the TA:

- Requisite breadth and depth of expertise in meteorological systems and solutions, in particular with their application and use in large public-sector organizations
- Familiarity with needs assessment, requirements definition and development of functional and technical specifications for meteorological systems, equipment and components
- Ability to work closely with technical and administrative personnel and senior management; experience in communicating results and disseminating information to management and to interested parties

Successful performance of the TA will require close collaboration with DMN to ensure that that maximum practical benefit is derived from the TA and that the resources thus acquired are put to good practical use. Furthermore, the following additional attributes are also considered critical to a successful outcome:

- Willingness of Contractor to spend significant time in-country
- A work plan ensuring close collaboration and interaction with DMN
- The capability to deliver quality results and recommendations in timely fashion
- Proficiency in French and/or French language support, at a level adequate to enable effective conduct of day-to-day work in that language (see also below)

The specific composition of the Contractor team for the recommended TA will now be described.

Team Composition and Experience

In terms of the composition and particular credentials of the Contractor, it is judged that the team should consist of a Project Manager, two Meteorological Specialists (with expertise in Systems and Data respectively), a Financial Expert, and a Procurement Expert (collectively, the Contractor Team), plus Local Support in Morocco. The position of Project Manager may be combined with that of one of any of the other members of the Contractor Team, provided that the person so designated meets all of the requirements of the two positions separately, and it can be shown that the proposed Contractor Team can efficiently carry out the full scope of the TA. More specific descriptions follow.

Project Manager:

- Degree in meteorology, climatology or related field
- At least ten (10) years' experience in the field of meteorology
- Specific expertise in operational/synoptic meteorology and related technology, systems and equipment
- Organizational, management and cross-cultural skills and perspective to structure,

oversee and carry out the TA effectively
- Ability to work closely and effectively with DMN personnel throughout the TA, as well as with DMN management and other stakeholders and interested parties
- Proficiency in French, at a level adequate to enable effective conduct of day-to-day work in that language, would be a definite advantage

Meteorological Systems Specialist:

- Demonstrated experience with meteorological and weather-station systems and equipment
- Specific experience with needs assessment and requirements definition across a range of types of weather stations
- Organizational and management skills and cross-cultural skills and perspective to structure, oversee and carry out the TA effectively
- Ability to work closely and effectively with DMN personnel throughout the TA

Meteorological Data Specialist:

- Demonstrated experience in working with, collecting and processing meteorological data
- Specific expertise in the interpretation of historical data, statistics and reports on climate-related phenomena
- Organizational and management skills to structure, oversee and carry out the TA effectively
- Proficiency in French, at a level adequate to enable effective conduct of day-to-day work in that language, would be a definite advantage

Financial Expert:

- Degree in finance, economics or related field
- Demonstrated experience in economic and financial analysis and modeling
- Specific experience in analyzing costs and benefits of large-scale long-term projects
- Organizational and management skills to structure, oversee and carry out the TA effectively

Procurement Expert:

- Demonstrated experience in procurement of systems, hardware and components, preferably with application to meteorology/climatology or related disciplines
- Specific experience in translating functional requirements into detailed technical specifications suitable for incorporation into procurement documents and tender packages
- Organizational, management and cross-cultural skills and perspective to structure, oversee and carry out the TA effectively
- Ability to work closely and effectively with DMN personnel
- Proficiency in French, at a level adequate to enable effective conduct of day-to-day work in that language, would be a definite advantage

In addition, the Contractor Team shall include Local Support. It is envisaged that Local Support will take the form of an individual or small firm based in Casablanca, with

knowledge and experience in working with public-sector institutions (ideally, with DMN and/or related organizations). The Local Support will provide general logistical and translation assistance and will assist the Contractor Team with various data-gathering and on-site activities (see the Terms of Reference in Annex I), as well as liaison and continuity in the intervals between in-country visits of U.S.-based Contractor Team members.

Suggested Evaluation Criteria

It is suggested that the selection of the Contractor be based on the following criteria:

Criterion	**Max. Points**
Expertise and skills of proposed personnel	40
Proposed approach to the TA and to the individual tasks	35
Pertinent international experience and cross-cultural skills	25
Total:	**100**

[DS Contractor comment: Since the TOR are unchanged, the above general qualifications of the Contractor and individual qualifications of the Contractor team members remain valid.]

K. Justification

The proposed Technical Assistance can be justified on the basis of its substantial positive developmental impact, both for DMN and for the larger Moroccan economy.

DMN is the Moroccan agency tasked with the provisioning of meteorological information, forecasts and alerts on a national scale. Successful performance of the TA will enable DMN to carry out its responsibilities more effectively and efficiently. Additionally, availability of more comprehensive and better-quality data will enable DMN to conduct more sophisticated analyses, in particular as regards the interpretation of long-term climatic effects.

As in many other countries, the availability of complete, accurate and timely weather- and climate-related information is of critical importance to a wide range of activities. The fact that Morocco is vulnerable to the effects of severe weather, and that important sectors of the Moroccan economy are sensitive both to short-term weather-related phenomena and to longer-term effects of climatic change, has already been noted (see in particular Sections B and C above). Coverage of Moroccan territory by the network of existing weather stations is incomplete, and some of the existing weather stations were installed to fill immediate short-term needs and are not well suited for longer-term purposes. The proposed modernization and optimization of the observational weather network will rectify these shortcomings and will yield significant immediate benefits in terms of

complete, accurate and timely weather forecasting and alerts, as well as longer-term benefits in terms of understanding and preparing for the impact of climatic change.

Accordingly, the DM Contractor believes that funding of the TA on behalf of DMN represents a good use of USTDA resources.

[DS Contractor comment: The DS Contractor believes that the above justification remains valid.]

ANNEX 3

U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-2131

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to assure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):

Except as USTDA may otherwise agree, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation of the TA and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to TA support (e.g., local lodging, food, and transportation) in host country are not subject to the above restrictions. USTDA will make available further details concerning these standards of eligibility upon request.

NATIONALITY:

1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. individuals, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

SOURCE AND ORIGIN:

1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

3) Definitions

"Source" means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and Direction de la Météorologie Nationale (National Meteorological Department) ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US$269,110 ("USTDA Grant") to fund the cost of goods and services required for a technical assistance ("Assistance") on the proposed Weather Observation Network System("Project") in Morocco ("Host Country").

PDF:
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1. USTDA Funding

The funding to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee ("Contractor") under which the Contractor will perform the Assistance ("Contract"). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

2. Terms of Reference

The Terms of Reference for the Assistance ("Terms of Reference") are attached as Annex I and are hereby made a part of this Grant Agreement. The Assistance will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Assistance shall also be included in the Contract.

3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials, and commercial entities, in their respective countries. The parties to this Grant Agreement and the Contractor shall observe these standards, which include not accepting payment of money or anything of value, directly or indirectly, from any person for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Assistance.

4. Grantee Responsibilities

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support.

5. **USTDA as Financier**

(A) USTDA Approval of Competitive Selection Procedures

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities (www.fedbizopps.gov)*. Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

(B) USTDA Approval of Contractor Selection

The Grantee shall notify USTDA at the address of record set forth in Article 17 below upon selection of the Contractor to perform the Assistance. Upon approval of this selection by USTDA, the Grantee and the Contractor shall then enter into a contract for performance of the Assistance. The Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Assistance that they were not selected.

(C) USTDA Approval of Contract Between Grantee and Contractor

The Grantee and the Contractor shall enter into a contract for performance of the Assistance. This contract, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing. To expedite this approval, the Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 17 below, a photocopy of an English language version of the signed contract or a final negotiated draft version of the contract.

(D) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Assistance and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they might

have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

(E) Grant Agreement Controlling

Regardless of USTDA approval, the rights and obligations of any party to the contract or subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any contract or subcontract funded by the Grant Agreement, the Grant Agreement shall be controlling.

6. Disbursement Procedures

(A) USTDA Approval of Contract Required

USTDA will make disbursements of Grant funds directly to the Contractor only after USTDA approves the Grantee's contract with the Contractor.

(B) Contractor Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the Assistance by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Clauses in Annex II.

7. Effective Date

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature.

8. Assistance Schedule

(A) Assistance Completion Date

The completion date for the Assistance, which is May 20, 2011, is the date by which the parties estimate that the Assistance will have been completed.

(B) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

9. USTDA Mandatory Clauses

All contracts funded under this Grant Agreement shall include the USTDA mandatory clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or partially funded with USTDA Grant funds shall include the USTDA mandatory clauses, except for clauses B(1), G, H, I, and J.

10. Use of U.S. Carriers

(A) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(B) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Assistance and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Assistance support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

12. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

13. Cooperation Between Parties and Follow-Up

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report (as defined in Clause I of Annex II), the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project.

14. Implementation Letters

To assist the Grantee in the implementation of the Assistance, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by the Grant Agreement. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by the Grant Agreement.

15. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the Assistance and the Grant Agreement adequate to demonstrate implementation of its responsibilities under the Grant Agreement, including the selection of contractors, receipt and approval of contract deliverables, and approval or disapproval of contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Assistance and the Grant Agreement.

16. Representation of Parties

For all purposes relevant to the Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by the Secretary of State in Charge of Water and Environment. The parties hereto may, by written notice, designate additional representatives for all purposes under the Grant Agreement.

17. Addresses of Record for Parties

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through a wire or electronic medium which produces a tangible record of the transmission, such as a telegram, cable or facsimile, and will be deemed duly given or sent when delivered to such party at the following:

To: Mr. Abdalah Mokssit
Director

National Meteorological Department
Face Prefecture-Hay Hassani
Casa Oasis,Casablanca
Morocco

Phone: (+212 522) 913699Fax: (+212 522) 913797
Email: mokssit.abdalah@yahoo.fr

To: U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.:11 10/11 1001
Activity No.:2010-21005A
Reservation No.: 2010 210002
Grant No.:GH 2010 210001

18. Termination Clause

Either party may terminate the Grant Agreement by giving the other party thirty (30) days advance written notice. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Assistance, except for payments which they are committed to make pursuant to noncancellable commitments entered into with third parties prior to the written notice of termination.

19. Non-waiver of Rights and Remedies

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

20. U.S. Technology and Equipment

By funding this Assistance, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

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Annex I

Terms of Reference

Introduction

The optimization of the national weather observation network of Morocco is intended to achieve the following principal objectives:

- Make available representative data for the entire national territory, for the purpose of integration into digital forecasting models
- Improve the reliability of forecasting and weather warnings
- Respond to the Grantee's increasing lack of human resources (as a result of retirement, gaps in training, etc.)
- Improve the Grantee's product quality so as to better satisfy its customers and users.

To assist the Grantee in achieving this optimization, the Contractor will carry out the following tasks.

Task 1: Kick-off Meeting and Review of Relevant Reports and Data

The Contractor shall travel to Morocco to meet with Grantee officials in Casablanca to review and discuss the Project's objectives.

The Contractor and the Grantee shall review and agree upon existing data that shall be made available to the Project, identify additional data that needs to be collected, and determine the role that the Grantee will play in terms of acquiring additional data necessary to complete the Project. The Contractor and the Grantee will develop a schedule for the collection of such data.

The Contractor shall become familiar with the structure, functions, responsibilities, capabilities and client base of the Grantee and the systems currently in use. Preliminary site visits to certain weather observation stations in Morocco may be included in this task (see also Task 2).

Additionally, the Contractor shall become familiar with the findings of a previous USTDA Definitional Mission that recommended a USTDA grant to the Grantee for a Feasibility Study (FS) related to upgrading Morocco's national weather radar network. The Contractor shall obtain the Definitional Mission report from USTDA. Furthermore, in the event that the FS in question is either complete or in progress at the time that the present Technical Assistance is undertaken, the Contractor shall coordinate with that activity as may be appropriate, to ensure that there is no duplication of effort.

Deliverable: The Contractor shall **prepare** an **Inception Report,** describing in particular the meetings held, sites visited, progress in collecting data, problems encountered or foreseen, the projected work schedule, and deployment of Contractor personnel.

Task 2: Station Visits and Diagnosis of the DMN's Synoptic Network Modules

The Contractor shall conduct detailed field assessments for a representative sample of synoptic stations of the Moroccan weather observation network. The synoptic stations to be visited shall be at least ten (10) in number, shall include some airport and marine stations, and shall be selected in consultation with the Grantee. Additionally, the Contractor shall visit the sites identified below:

- North Regional Meteorology Department (based in Rabat)
- North-East Regional Meteorology Department (based in Fès)
- Central Regional Meteorology Department (based in Casablanca)
- South Regional Meteorology Department (based in Agadir)

The principal aim of these station and site visits is to identify shortcomings and insufficiencies of the existing synoptic weather observation network. The site visit shall also provide a basis for proposing solutions that would effectively meet the Grantee's goals for upgrading and expanding the network in accordance with international standards, e.g., those of the World Meteorological Organization (WMO) and the International Civil Aviation Organization (ICAO), with due allowance for the needs of the Grantee client base.

The assessment shall include, but is not necessarily limited to, the analysis of:

- Current and planned future systems, equipment and maintenance
- Training and capacity building needs
- Quality Assurance systems and services
- Telecommunications network infrastructure and performance.

Task 3: Review and Analysis of Statistics on Recent Climate Related Phenomena

The upgraded and expanded network is intended to increase the quality of meteorological information, and to adapt the meteorological products, especially weather forecasting and warning, to the needs of each economic sector taking into account the particularities of each climatic zone.

Accordingly, the Contractor shall conduct an extensive review and analysis of statistics and reports on climate related phenomena, to be provided by the Grantee. This will include statistics and reports on occurrences of floods / flash floods, excessive rain storms, fog, drought and any other relevant weather related phenomena occurring in

Morocco. The analysis shall include information and statistics on users of meteorological information, categorized by economic sectors.

In particular, the data is to be categorized by geographic location in order to determine the climatic zones that are covered by the network versus those that are not currently covered by the network.

The importance of such meteorological information will be considered as a benefit to the investment, to be incorporated in Task 5 below.

Deliverable: The Contractor shall prepare a **Report** covering the Review of Statistics on Recent Climate Related Phenomena as described above. Subject to approval by the Grantee, this report may be submitted simultaneously with the Task 4 deliverable described below.

Task 4: Determination of Resource and Equipment Needs

Based on the findings of Tasks 1–3 above, the Contractor shall determine:

1. The equipment required to upgrade the existing network of weather observation stations.
2. The number and profile of additional automated weather stations, radiosonde stations, lightning detectors, and airport meteorological equipment, marine equipment such as radars, marigraphs (recording tide gauges), and buoys, and all other equipment that need to be acquired in order to expand the existing network; and
3. The investment required to implement the additional stations in question.

The Contractor shall detail the technical specifications, quantities, and requirements for all equipment recommended for upgrading and expanding the existing network of weather stations. In addition, to the extent practicable, the Contractor shall identify the number and geographic location of the additional new stations (the "Contractor's Recommended Set of New Stations"), and shall develop detailed equipment configurations for each. Additionally, the Contractor shall identify any feasible alternatives to the Recommended Set of New Stations, and shall provide a general description and analysis of project impacts should DMN choose to pursue these alternatives.

The recommended equipment list shall include a list of potential U.S. suppliers.

In addition, the Contractor shall provide a detailed description of the additional human resources and competencies needed to manage the upgraded network and to perform all necessary day-to-day operations. The Contractor shall advise the Grantee on appropriate ways of satisfying the human resources requirements (e.g., retraining, recruitment, subcontracting/outsourcing), taking into account the particular features of the various meteorological services (marine, aeronautical, agricultural, etc.) and their clients.

Deliverable: **Final Resource Needs Assessment Report.** Upon completing Tasks 2–4 above, the Contractor shall submit ten (10) copies of a Resource Needs Assessment Draft Report to the Grantee. The Draft Report shall include an analysis of the feasible and recommended alternatives for the Project. The Grantee shall be given adequate time to review the Resource Needs Assessment Draft Report and to propose modifications or amendments (if any) for incorporation into the final version of the report. The Grantee and Contractor shall agree in the Contract to be negotiated between the Grantee and the Contractor, on the time required for the Grantee review process. After receiving the Grantee's comments on the draft report, the Contractor shall prepare and submit to the Grantee ten (10) copies of the Resource Needs Assessment Report in final form, duly incorporating the proposed modifications or amendments.

Task 5: Economic and Financial Analysis of the Project

The Contractor shall prepare an economic and financial analysis of the entire Project, covering the upgrade of the existing network of weather stations and the new stations to be added in order to optimize the synoptic observation network. The analysis shall include the full costs of implementation, and shall also describe the expected benefits.

The analysis shall also assess the likely positive impact of strengthening and optimizing the meteorological observation network, and the result of this improvement on the technical/technological infrastructure of the Grantee.

The Contractor shall identify likely sources of financing for the Project. The Contractor shall pay particular attention to exploring potential financing sources with representatives of the World Bank, USAID, African Development Bank and other multilateral and international financial institutions with a significant track record in Morocco.

Deliverable: The Contractor shall prepare a **Report** covering the Economic and Financial Analysis of the Project as described above.

Task 6: Preliminary Environmental and Developmental Impact Assessment. Task 6 consists of two sub-tasks, as follows:

Sub-Task 6a: Preliminary Environmental Impact Assessment. The Contractor shall perform a preliminary review of the anticipated impact of the Project on the environment, with particular reference to compliance with any applicable Moroccan or multilateral lending-agency (e.g., World Bank) requirements. In the event that the review identifies any potential negative impacts, the Contractor shall discuss the extent to which they can be mitigated, and shall develop plans for a full environmental impact assessment if and when the project moves forward to the implementation stage. In particular, the Contractor shall identify any steps that the Grantee will need to undertake subsequent to the completion of the Contractor's activities and prior to project implementation.

Sub-Task 6b: Analysis of Key Host Country Development Impacts. With a view to providing the Project's decision-makers and interested parties with a broader view of the

project's potential effects on the host country, the Contractor shall conduct an analysis of key development impacts of the project, with particular reference to the following aspects:

- ***Infrastructure:*** How the Technical Assistance will result in improvements to and/or increased investment in infrastructure (both direct and indirect)
- ***Human Capacity Building:*** Skills development and/or additional employment that will be generated within the Grantee work environment and elsewhere
- ***Technology Transfer and Productivity Improvement:*** Identification of new recommended technologies deployed in conjunction with the Project, and specific technology or knowledge transfer that will take place
- ***Market-Oriented Reform:*** Identification of any market-oriented reforms that will be achieved as a result of the Technical Assistance, which could include improved competition; better market entry to new investment; more equitable consumer pricing policies; etc.

The analysis shall focus on likely developmental impact if the Project is implemented according to the Contractor's recommendations. While specific attention shall be paid to the immediate impact of the Project, analysis shall include any additional developmental benefits that may result from the Project's implementation, including spin-off and demonstration effects.

Deliverable: The Contractor shall prepare a **Report** containing the Environmental Impact Assessment and Developmental-Impact Analysis as described above.

Task 7: Procurement Plan and Bid Package Preparation

Based on the findings of Tasks 1–5 above, and in conjunction with the Grantee (and representatives of other pertinent Moroccan government agencies, if applicable), the Contractor shall prepare a prioritized Phasing Plan for upgrading and expanding the weather Moroccan observation network.

The Contractor shall assist the Grantee in preparing the Bid Package for procurement of the recommended systems and equipment. The responsibility of the Contractor shall focus on reviewing and recommending technical specifications, quantities, and requirements for all systems and equipment needed for upgrading and expanding the existing network of synoptic observation stations.

The Contractor shall draw up technical specifications based on the findings, in consultation with the Grantee. Preparation of the tender documents and the commercial parameters of the tender shall be the responsibility of the Grantee, but the Contractor shall advise the Grantee on typical terms and conditions used in similar international projects, especially in regards to procurement, installation, commissioning, warranties, maintenance, training and other pertinent services.

The Contractor shall identify qualified U.S.-based suppliers of systems and equipment that may be procured.

During this task, the Contractor and the Grantee shall discuss the optimum strategy for tendering of the required goods and services, and to what extent the procurement of hardware/software, services, and training should be combined or tendered separately.

The Contractor shall advise the Grantee on the method of evaluation of technical proposals.

Deliverable: The Contractor shall prepare the Phasing Plan, Technical Specifications and supporting materials as described above.

Task 8: Draft Final and Final Reports

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

The Contractor shall submit ten (10) copies of Draft Final Report to the Grantee. The Grantee shall be given adequate time to review the Draft Final Report and to propose modifications or amendments (if any) for incorporation into the Final Report. The Grantee and Contractor shall agree in the Contract to be negotiated between the Grantee and the Contractor on the time required for the Grantee review process. .

The Contractor shall identify prospective U.S. sources of supply in the Final Report, in accordance with Clause I of Annex II of the Grant Agreement. Ten (10) copies of the Final Report shall be submitted to the Grantee.

Notes:

(1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

(2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.

(3) **The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.**

Annex II

USTDA Mandatory Contract Clauses

A. USTDA Mandatory Clauses Controlling

The parties to this contract acknowledge that this contract is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and Direction de la Météorologie Nationale ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("Contractor") to perform the technical assistance ("Assistance") for theWeather Observation Network System project ("Project") in Morocco ("Host Country"). Notwithstanding any other provisions of this contract, the following USTDA mandatory contract clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA mandatory contract clauses, except for clauses B(1), G, H, I, and J. In addition, in the event of any inconsistency between the Grant Agreement and any contract or subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Contract

All contracts funded under the Grant Agreement, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the contract has been formally approved by USTDA or until the contract conforms to modifications required by USTDA during the contract review process.

(2) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the Assistance and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by

USTDA shall not bar the Client or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

C. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Assistance and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Assistance support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

D. Recordkeeping and Audit

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents sufficient to reflect properly all transactions under or in connection with the contract. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the contract term and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

E. U.S. Carriers

(1) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(2) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

F. Workman's Compensation Insurance

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

G. Reporting Requirements

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Assistance. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, and fax number. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

H. Disbursement Procedures

(1) USTDA Approval of Contract

Disbursement of Grant funds will be made only after USTDA approval of this contract. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor a photocopy of an English language version of a signed contract or a final negotiated draft version to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(2) Payment Schedule Requirements

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon receipt by USTDA of an approved Final Report in accordance with the specifications and quantities set forth in Clause I below. Invoicing procedures for all payments are described below.

(3) Contractor Invoice Requirements

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by

USTDA to the Contractor for performance of the contract by submitting the following to USTDA:

(a) Contractor's Invoice

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

(i) For a mobilization payment (if any):

"As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA. "

(ii) For contract performance milestone payments:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client's approval of the Final Report. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(b) Client's Approval of the Contractor's Invoice

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement."

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client. "

(c) USTDA Address for Disbursement Requests

Requests for disbursement shall be submitted by courier or mail to the attention of the Finance Department at USTDA's address listed in Clause M below.

(4) Termination

In the event that the Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for reasonable and documented costs which have been incurred in performing the Terms of Reference prior to termination, as well as reasonable wind down expenses. Reimbursement for such costs shall not exceed the total amount of undisbursed Grant funds. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously disbursed to the Contractor (including but not limited to mobilization payments) which exceed the reasonable and documented costs incurred in performing the Terms of Reference prior to termination.

I. USTDA Final Report

(1) Definition

"Final Report" shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such "Final Report" is described therein, "Final Report" shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

(2) Final Report Submission Requirements

The Contractor shall provide the following to USTDA:

(a) One (1) complete version of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) copy of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) copy of the Public Version of the Final Report to the Foreign Commercial Service Officer or the Economic Section of the U.S. Embassy in Host Country for informational purposes.

(3) Final Report Presentation

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, USTDA's mailing and delivery addresses. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version." The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version." The front cover of every Final Report shall also contain the following disclaimer:

> "This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U. S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's mailing and delivery addresses, and USTDA's mission statement.

Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

> "The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

(d) The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers shall be included for Contractor and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

J. Modifications

All changes, modifications, assignments or amendments to this contract, including the appendices, shall be made only by written agreement by the parties hereto, subject to written USTDA approval.

K. Assistance Schedule

(1) Assistance Completion Date

The completion date for the Assistance, which is May 20, 2011, is the date by which the parties estimate that the Assistance will have been completed.

(2) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

L. Business Practices

The Contractor agrees not to pay, promise to pay, or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a governmental official or private individual) for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Assistance. The Client agrees not to receive any such payment. The Contractor and the Client agree that each will require that any agent or representative hired to represent them in connection with the Assistance will comply with this paragraph and all laws which apply to activities and obligations of each party under this Contract, including but not limited to those laws and obligations dealing with improper payments as described above.

M. USTDA Address and Fiscal Data

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below.

U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

Fiscal Data:
Appropriation No.:11 10/11 1001
Activity No.:2010-21005A
Reservation No.: 2010 210002
Grant No.:GH 2010 210001

N. Definitions

All capitalized terms not otherwise defined herein shall have the meaning set forth in the Grant Agreement.

O. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Client nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

IN WITNESS WHEREOF, the Government of the United States of America and Direction de la Météorologie Nationale each acting through its duly authorized representative, have caused this Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.

For the Government of the United States of America

By: Samuel L. Kaplan

Date: January 21, 2010

Witnessed:

By: Jane Kitson

For Direction de la Météorologie Nationale

By: [illegible]

Date: 21/01/2010

Witnessed:

By: [illegible]

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Clauses

TERMS OF REFERENCE

Introduction

The optimization of the national weather observation network of Morocco is intended to achieve the following principal objectives:

- Make available representative data for the entire national territory, for the purpose of integration into digital forecasting models
- Improve the reliability of forecasting and weather warnings
- Respond to the Grantee's increasing lack of human resources (as a result of retirement, gaps in training, etc.)
- Improve the Grantee's product quality so as to better satisfy its customers and users.

To assist the Grantee in achieving this optimization, the Contractor will carry out the following tasks.

Task 1: Kick-off Meeting and Review of Relevant Reports and Data

The Contractor shall travel to Morocco to meet with Grantee officials in Casablanca to review and discuss the Project's objectives.

The Contractor and the Grantee shall review and agree upon existing data that shall be made available to the Project, identify additional data that needs to be collected, and determine the role that the Grantee will play in terms of acquiring additional data necessary to complete the Project. The Contractor and the Grantee will develop a schedule for the collection of such data.

The Contractor shall become familiar with the structure, functions, responsibilities, capabilities and client base of the Grantee and the systems currently in use. Preliminary site visits to certain weather observation stations in Morocco may be included in this task (see also Task 2).

Additionally, the Contractor shall become familiar with the findings of a previous USTDA Definitional Mission that recommended a USTDA grant to the Grantee for a Feasibility Study (FS) related to upgrading Morocco's national weather radar network. The Contractor shall obtain the Definitional Mission report from USTDA. Furthermore, in the event that the FS in question is either complete or in progress at the time that the present Technical Assistance is undertaken, the Contractor shall coordinate with that activity as may be appropriate, to ensure that there is no duplication of effort.

Deliverable: The Contractor shall **prepare** an **Inception Report,** describing in particular the meetings held, sites visited, progress in collecting data, problems encountered or foreseen, the projected work schedule, and deployment of Contractor personnel.

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- North-East Regional Meteorology Department (based in Fès)
- Central Regional Meteorology Department (based in Casablanca)
- South Regional Meteorology Department (based in Agadir)

The principal aim of these station and site visits is to identify shortcomings and insufficiencies of the existing synoptic weather observation network. The site visit shall also provide a basis for proposing solutions that would effectively meet the Grantee's goals for upgrading and expanding the network in accordance with international standards, e.g., those of the World Meteorological Organization (WMO) and the International Civil Aviation Organization (ICAO), with due allowance for the needs of the Grantee client base.

The assessment shall include, but is not necessarily limited to, the analysis of:

- Current and planned future systems, equipment and maintenance
- Training and capacity building needs
- Quality Assurance systems and services
- Telecommunications network infrastructure and performance.

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Accordingly, the Contractor shall conduct an extensive review and analysis of statistics and reports on climate related phenomena, to be provided by the Grantee. This will include statistics and reports on occurrences of floods / flash floods, excessive rain storms, fog, drought and any other relevant weather related phenomena occurring in Morocco. The analysis shall include information and statistics on users of meteorological information, categorized by economic sectors.

In particular, the data is to be categorized by geographic location in order to determine the climatic zones that are covered by the network versus those that are not currently covered by the network.

The importance of such meteorological information will be considered as a benefit to the investment, to be incorporated in Task 5 below.

Deliverable: The Contractor shall prepare a **Report** covering the Review of Statistics on Recent Climate Related Phenomena as described above. Subject to approval by the Grantee, this report may be submitted simultaneously with the Task 4 deliverable described below.

Task 4: Determination of Resource and Equipment Needs

Based on the findings of Tasks 1–3 above, the Contractor shall determine:

1. The equipment required to upgrade the existing network of weather observation stations.
2. The number and profile of additional automated weather stations, radiosonde stations, lightning detectors, and airport meteorological equipment, marine equipment such as radars, marigraphs (recording tide gauges), and buoys, and all other equipment that need to be acquired in order to expand the existing network; and
3. The investment required to implement the additional stations in question.

The Contractor shall detail the technical specifications, quantities, and requirements for all equipment recommended for upgrading and expanding the existing network of weather stations. In addition, to the extent practicable, the Contractor shall identify the number and geographic location of the additional new stations (the "Contractor's Recommended Set of New Stations"), and shall develop detailed equipment configurations for each. Additionally, the Contractor shall identify any feasible alternatives to the Recommended Set of New Stations, and shall provide a general description and analysis of project impacts should DMN choose to pursue these alternatives.

The recommended equipment list shall include a list of potential U.S. suppliers.

In addition, the Contractor shall provide a detailed description of the additional human resources and competencies needed to manage the upgraded network and to perform all necessary day-to-day operations. The Contractor shall advise the Grantee on appropriate ways of satisfying the human resources requirements (e.g., retraining, recruitment, subcontracting/outsourcing), taking into account the particular features of the various meteorological services (marine, aeronautical, agricultural, etc.) and their clients.

Deliverable: **Final Resource Needs Assessment Report.** Upon completing Tasks 2–4 above, the Contractor shall submit ten (10) copies of a Resource Needs Assessment Draft Report to the Grantee. The Draft Report shall include an analysis of the feasible and recommended alternatives for the Project. The Grantee shall be given adequate time to review the Resource Needs Assessment Draft Report and to propose modifications or amendments (if any) for incorporation into the final version of the report. The Grantee and Contractor shall agree in the Contract to be negotiated between the Grantee and the Contractor, on the time required for the Grantee review process. After receiving the

Grantee's comments on the draft report, the Contractor shall prepare and submit to the Grantee ten (10) copies of the Resource Needs Assessment Report in final form, duly incorporating the proposed modifications or amendments.

Task 5: Economic and Financial Analysis of the Project

The Contractor shall prepare an economic and financial analysis of the entire Project, covering the upgrade of the existing network of weather stations and the new stations to be added in order to optimize the synoptic observation network. The analysis shall include the full costs of implementation, and shall also describe the expected benefits.

The analysis shall also assess the likely positive impact of strengthening and optimizing the meteorological observation network, and the result of this improvement on the technical/technological infrastructure of the Grantee.

The Contractor shall identify likely sources of financing for the Project. The Contractor shall pay particular attention to exploring potential financing sources with representatives of the World Bank, USAID, African Development Bank and other multilateral and international financial institutions with a significant track record in Morocco.

Deliverable: The Contractor shall prepare a **Report** covering the Economic and Financial Analysis of the Project as described above.

Task 6: Preliminary Environmental and Developmental Impact Assessment. Task 6 consists of two sub-tasks, as follows:

Sub-Task 6a: Preliminary Environmental Impact Assessment. The Contractor shall perform a preliminary review of the anticipated impact of the Project on the environment, with particular reference to compliance with any applicable Moroccan or multilateral lending-agency (e.g., World Bank) requirements. In the event that the review identifies any potential negative impacts, the Contractor shall discuss the extent to which they can be mitigated, and shall develop plans for a full environmental impact assessment if and when the project moves forward to the implementation stage. In particular, the Contractor shall identify any steps that the Grantee will need to undertake subsequent to the completion of the Contractor's activities and prior to project implementation.

Sub-Task 6b: Analysis of Key Host Country Development Impacts. With a view to providing the Project's decision-makers and interested parties with a broader view of the project's potential effects on the host country, the Contractor shall conduct an analysis of key development impacts of the project, with particular reference to the following aspects:

- ***Infrastructure:*** How the Technical Assistance will result in improvements to and/or increased investment in infrastructure (both direct and indirect)
- ***Human Capacity Building:*** Skills development and/or additional employment that will be generated within the Grantee work environment and elsewhere

- ***Technology Transfer and Productivity Improvement:*** Identification of new recommended technologies deployed in conjunction with the Project, and specific technology or knowledge transfer that will take place
- ***Market-Oriented Reform:*** Identification of any market-oriented reforms that will be achieved as a result of the Technical Assistance, which could include improved competition; better market entry to new investment; more equitable consumer pricing policies; etc.

The analysis shall focus on likely developmental impact if the Project is implemented according to the Contractor's recommendations. While specific attention shall be paid to the immediate impact of the Project, analysis shall include any additional developmental benefits that may result from the Project's implementation, including spin-off and demonstration effects.

Deliverable: The Contractor shall prepare a **Report** containing the Environmental Impact Assessment and Developmental-Impact Analysis as described above.

Task 7: Procurement Plan and Bid Package Preparation

Based on the findings of Tasks 1–5 above, and in conjunction with the Grantee (and representatives of other pertinent Moroccan government agencies, if applicable), the Contractor shall prepare a prioritized Phasing Plan for upgrading and expanding the weather Moroccan observation network.

The Contractor shall assist the Grantee in preparing the Bid Package for procurement of the recommended systems and equipment. The responsibility of the Contractor shall focus on reviewing and recommending technical specifications, quantities, and requirements for all systems and equipment needed for upgrading and expanding the existing network of synoptic observation stations.

The Contractor shall draw up technical specifications based on the findings, in consultation with the Grantee. Preparation of the tender documents and the commercial parameters of the tender shall be the responsibility of the Grantee, but the Contractor shall advise the Grantee on typical terms and conditions used in similar international projects, especially in regards to procurement, installation, commissioning, warranties, maintenance, training and other pertinent services.

The Contractor shall identify qualified U.S.-based suppliers of systems and equipment that may be procured.

During this task, the Contractor and the Grantee shall discuss the optimum strategy for tendering of the required goods and services, and to what extent the procurement of hardware/software, services, and training should be combined or tendered separately.

The Contractor shall advise the Grantee on the method of evaluation of technical proposals.

Deliverable: The Contractor shall prepare the Phasing Plan, Technical Specifications and supporting materials as described above.

Task 8: Draft Final and Final Reports

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

The Contractor shall submit ten (10) copies of Draft Final Report to the Grantee. The Grantee shall be given adequate time to review the Draft Final Report and to propose modifications or amendments (if any) for incorporation into the Final Report. The Grantee and Contractor shall agree in the Contract to be negotiated between the Grantee and the Contractor on the time required for the Grantee review process. .

The Contractor shall identify prospective U.S. sources of supply in the Final Report, in accordance with Clause I of Annex II of the Grant Agreement. Ten (10) copies of the Final Report shall be submitted to the Grantee.

Notes:

(1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.

(2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.

(3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.

ANNEX 6

COMPANY INFORMATION

A. Company Profile

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), the information below must be provided for each subcontractor.

1. Name of firm and business address (street address only), including telephone and fax numbers:

2. Year established (include predecessor companies and year(s) established, if appropriate).

3. Type of ownership (e.g. public, private or closely held).

4. If private or closely held company, provide list of shareholders and the percentage of their ownership.

5. List of directors and principal officers (President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer; provide full names including first, middle and last). Please place an asterisk (*) next to the names of those principal officers who will be involved in the TA.

6. If Offeror is a subsidiary, indicate if Offeror is a wholly-owned or partially-owned subsidiary. Provide the information requested in items 1 through 5 above for the Offeror's parent(s).

7. Project Manager's name, address, telephone number, e-mail address and fax number .

B. Offeror's Authorized Negotiator

Provide name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

C. Negotiation Prerequisites

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the TA as proposed and reflect such impact within the project schedule.

2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

D. Offeror's Representations

Please provide exceptions and/or explanations in the event that any of the following representations cannot be made:

1. Offeror is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of _____. The Offeror has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the TA. The Offeror is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment, or ineligible for the award of contracts by any federal or state governmental agency or authority. The Offeror has included, with this proposal, a

certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of _____.

2. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the Offeror, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The Offeror has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee. USTDA retains the right to request an updated certificate of good standing from the selected Offeror.

Signed: _____
(Authorized Representative)

Print Name: _____

Title: _____

Date: _____

E. Subcontractor Profile

1. Name of firm and business address (street address only), including telephone and fax numbers.

2. Year established (include predecessor companies and year(s) established, if appropriate).

F. Subcontractor's Representations

If any of the following representations cannot be made, or if there are exceptions, the subcontractor must provide an explanation.

1. Subcontractor is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of _____. The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the Offeror is selected, to execute and deliver a subcontract to the Offeror for the performance of the TA and to perform the TA. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. Neither the subcontractor nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected subcontractor shall notify the Offeror, Grantee and USTDA if any of the representations included in this proposal are no longer true and correct at the time of the Offeror's entry into a contract with the Grantee.

Signed: _____
(Authorized Representative)

Print Name: _____

Title: _____

Date: _____